U. S. DEPARTMENT OF AGRICULTURE

BUREAU OF BIOLOGICAL SURVEY

Form Bi-689

FIELD DIARY

Mr. Vernon Bailey
Washington D.C.!

(Official title.)

Period, Oregon 1930 to

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GOVERNMENT PRINTING OFFICE 8—4925

1930

Nov. 21 Portland, Oregon

Arrived at Portland 7:35 AM and went to Hoyt Hotel across the street from the post office.

Got a much needed bath and started on fulldaysorts for Washington.

Nov. 22 – Wrote all day.

Lunched at Oyster loaf on pannned Olympia oysters, delicious.

Nov. 23 – Sunday. Went to Jewetts for dinner and had wonderful view of Mt. Hood and St Helens.

Warm and smoking and lots of cases and Chrysanthemums in blossom.

Nov. 24 Portland to Eugene.
Had conference with Jewett and Gabrielson and Bach in forenoon. Went to lunch with Jewett & Brailey and saw Brailey's egg and skin collection the most perfect I ever saw. with many rare species.

At 3 PM started for Eugene with Elmer Williams with his Ford roadster truck and arrived 6:15, 124 miles on good roads with a good driver and comfortable car. Met Chester Hight our trapper at Eugene and planned trip for tomorrow.
Wonderful view of Hood and St. Helens & Adams & the peak of Jefferson but dark before we reached a view of Three Sisters
Warm and pleasant.

Nov. 25, 1930 Eugene, Oregon.

Started out for poison line at 8 AM west of ~~Rancho~~ Cottage Grove. Followed trail for 4 miles over ridges in heavy timber with Chesty Hight to terrain. No bait station used but poison in hard balls had been placed along the sides of trail through woods. Many were found, some were missing, a few had been nibbled by mice or squirrels. One *Perognathus gambeli* found dead near a bait was all we found but half a dozen coyotes had previously been found along this line. We saw remains of two that had not been saved.

Mr. Hart reports 100 coyotes taken in this region in four years but probably as many more killed by poison and not found. Only 14 trapped.

Chester Hight Eugene.

Coyotes, 100 in four years, only 14 in traps
probably as many was poisoned outfree
Raccoons - 4 taken, all poisoned
Skunks - not over six, all poisoned.
Spotted cats - 3 poisoned.
Porcupines - A few poisoned
~~Bobcat - not other wild animals~~
Foxes - One poisoned
Owl - One caught in trap yesterday.
Bear - 1 poisoned and 2 trapped
Dogs - A few poisoned
Blue grouse, One caught in Coyote trap.
Oregon Robin, One caught in Coyote trap.

Many sheep, goats, deer and game birds killed by Coyotes.
Droppings found along trail

Returned to Eugene at 1 PM and saw County Agent in afternoon. Mr. Fletcher, Has given out no poison.

Saw County Judge and petition he had recieved against using poison in Linn Co. signed by 93 residents of Row River Valley, 8 E of Eugene. This is a good deer country and everybody keeps hounds for running deer. They also keep a pup but can more for their hounds. It is a region long famous for poachers and settled by old timers.

They say the poison kills more furbearing and valuable animals than the coyotes. They want to use "varmint dogs" for hunting coyotes, cats, and cougars and prefer to control such animals themselves. Let em.

But they want to cut out any

money in the county budget for coyote control and leave the rest of the county without protection.
Another hearing will be held tomorrow.

Chester Hight keeps coyotes down to practically harmless numbers in two large counties Lane and Linn, really controlling them in half of Western Oregon as no other trappers operate nearer them Marshfield and Rogue River Valley. To cover this large area he uses poison almost entirely all the year around and places a line for some local farmer to go over and keep watch of. He also gives out prepared poison baits to many sheep men and farmers to use on or near their own places.
This an exceeding economical and efficient method of control and enables one man to cover a large territory.
He says there are no weasels, no mink, no foxes in his area

He gets a very few coons, skunks and Spilogale but of little value at any time.

Keeping the coyotes under control has kept deer abundant and we saw numerous tracks today where they had followed the trail and eaten all the fresh mushrooms they could find. Cattle and sheep also eat them as do squirrels and rats and many birds. They are very numerous and of many kinds, largely Russula, Boletus, Coral, fairy rings and a snow white form I never saw before.

Went through miles of wonderful timber, unburned woods full of ferns and the ground carpeted with Hypnum and other mosses.

A heavy frost in morning, the first, but many roses and Chrysanthemums were not killed. A warm clear day.

Collected can of Coyote droppings.

Nov. 26 – Eugene up McKenzie River
Chester Hight took me up.
The McKenzie River about 15 miles
to Frank Haagen's farm just
across the river from the road.
Went over a poison line but
when 6 or 7 coyotes had been
killed but found only one dead
and very old Spilogale.
Got plenty of coyote droppings
mostly making of goated deer hair
Saw a lot of fresh deer tracks,
several ruffed grouse, one
mountain quail.
Returned to Eugene afternoon
and to Portland at night.
Mr. Haagen keeps several
hundred sheep and has just
sold his flock of goats.
Has a beautiful place of 400
acres, creeks, falls, springs, forest,
bottom bottoms + good crops.

Dogs kill more sheep than do coyotes. Lane pays 3000 or 4000 dollars a year for sheep killed by dogs as long as the dog tax money lasts. Linn E. about the same. Most of the dogs are kept for varmint dogs & coon hunting.

Last fall a police dog got left by an automobile near Cottage Grove and went wild, killing 27 sheep and goats before it was poisoned — probably more not found.

Two years ago a police dog near Grants Pass killed a child and tore it all to pieces. They are much worse than coyotes or wolves when uncontrolled. Are only half tamed wolves.

On return trip, to Portland 9 California jackrabbits were counted crushed in the road between Eugene and Salem, all freshly killed within a day or two. None seen alive.

Killdeer — 2 in field near Salem
Mourning Doves — 3 near Albany.

Nov. 27 Thanksgiving Day,
Finished my writing,
repacked baggage for trip,
Went to Jewetts for Thanksgiving dinner
Packed two cans of coyote droppings to go by mail.

Nov. 28, Portland to Grass Valley.
Left Portland at 10 AM with Elmer Williams and drove up the Columbia Highway to The Dalles, then to Dufur to see Trapper Mayhue. He had just brought in one coyote and did not expect any more today on his poison line so we went on across the Des Chutes at Shearers Bridge and east to Grass Valley where Trapper Stone has out a lot of baits. Arranged to go with him in morning and went to hotel for night.
Foggy and misty in morning but cleared up until we struck fort and fog on the high country near Dufur. Fog and fog again on hills east of Des Chutes but not much snow.

Nov. 29 - Left Grass Valley at 8 AM and went over traps line with trapper Stone along the crest of west rim of John Day Canyon and at head of big gulch heading down to west. Examined 3 of his poison stations but got only one coyote and found two eagles eating it. They had torn the skin to tatters and eaten most of the meat and insides. Only the scalp could be saved. It was about 100 yards from the dead horse where poisoned.

Ravens were eating on both the other horses, 6 on one and 2 on the other. None had been killed as yet but they soon will be.

Saw a few magpies and later in the day on Willow Creek below Heppner a flock of 100 or more magpies. Saw a few along the road and a few nests.

~~Canadian~~ Geese – About 1000 seen on sandbars and in still pools in the Columbia and one flock of 50 near Moro over the high prairie where they had been in the stubble and growing grain fields.

Ducks. A few in Columbia River

Eagles – 2 seen eating coyote, probably Golden. Destroy many coyote skins.

Ravens – About a dozen seen. Very numerous and breed along cliffs of Columbia & probably kill young geese.

Magpies – A few seen along way and one flock of 100 or more below Heppner.

Shrike. 1 seen on Willow Creek

Horned larks – A few seen near Grass Valley and Moro.

Juncos – many seen.

Got lunch at Moro and then drove down the highway to the Columbia and up it to Heppner Jct. and up Willow Creek to Heppner arriving at 5 PM. after dark.

Was much impressed by the deep canyons and side gulches with steep grassy slopes that can be used only by sheep. Many farms are half good wheat land and half good sheep land and many sheep are kept by the best farmers as well as by some large sheep men who make this their business. Farmers are generally prosperous and have good homes with a variety of stock and poultry and the control of coyotes magpies and ravens is important for all of them.

Talked with a sheep farmer near Moro, Mr. May, and saw how important sheep are for steep lands.

In evening at Hoppes met the County Agent, Chas W Smith, and he assured me that no poison was given out except to well know cooperators.

Met a number of Sheep owners who were loud in their praise of the 1925 control of Coyotes. Bruce Kelley is one of the largest sheep owners in the state and Garnett Barrett and his father have 9500 sheep. Lost 143 sheep in 4 months by Coyotes over on North Fork of John Day this year.

Had 44 killed in 2 nights last year in same region.

Owen man Knoblock has cleaned them out recently so there are few left.

Nov. 30 With Elmer Williams and Adam Knoblock drove over to Zuppes Ranger Station and beyond into edge of North Fork John Day Valley to examine several poison stations put out for Coyotes before the snow.

Found no coyotes and only one track but five had been killed there recently and 3 at another horse.

Saw hundreds of tracks of elk and deer, some badgers and porcupines, Jack rabbit (both kinds), snowshoe rabbits and cottontail tracks up in limbs. Red squirrel, weasel and mice tracks.

Snow begins with yellow pines and gets a foot deep on high cold slopes. Was 30 inches last week. Clear and warm and pleasant on snow, Cold and

To Zuppa R.S.

Ruffed grouse – 1 seen, scarce
Blue grouse – scarce –
Golden Eagle – 1 seen above Hoppes
Pheasants – 4 seen above Hoppes –
Flickers – 2 seen
Magpies – A few poisoned & nests seen.
Crossbills – Heard.

Elk – Hundreds
Mule deer – "
Pine squirrel common
Lepus townsendi A few
" wallamatta "
Sylvilagus nuttallii "
Porcupine – Many
Coyote – A few
Bobcat – scarce
Bear – Hibernated Nov. 15.
Badger – fresh holes
Weasel – several tracks

foggy below to near Hoppes
No fog lower down but all cloudy.
Heavy frost in fog belt at
telephone wires an inch thick
with frost and many broken down.
Has been foggy for 10 days or
more. The fog belt seems to
be the wheat belt.

Dec. 1. Heppner to La Grande

Left Heppner 8 AM and drove to Pendleton where we saw the County Agent, Walter A. Holt who is also secretary of the Oregon Wool Growers Assn. He is a clear thinker and says we are not giving the information to the people we should. Also suggests that Gabrielson use more publicity for our work instead of writing so much for pay, and giving so much time to outside work.

Saw John Erion, forest supervisor at Pendleton who vouches for a great increase in game, deer, elk and antelope since the coyotes were reduced in numbers.

Saw sheep men, Fred Falconer, largest owner in Oregon, 50 000 ave. & Mac. Hoke, a large sheep owner. They were much pleased with our work but would it pushed harder.

Hippus to La Grande

Lepus campestris - a few dead in road
Lepus wallamatta - A few dead in woods backs
Lepus townsendi - Jacks common on mountains
Sylvilagus nuttallii - One dead in road
Weasel, Elmer Williams found on killing a Lepus campestris near John Day River a year ago -

Golden eagles - 4 seen along road
Magpies - a few seen
Swainson's hawk - 1 seen on pole near road
Shrike - 1 seen
Blackbirds - Several flocks seen.
Raven - 1 seen on road
Ducks - many in reservoir on Little Creek
Pheasants - a few seen along way.

At La Grande we saw County Agent Avery and Forest ranger Tucker

- Missed our happiness at Meacham and Cayuse but left word for them to join us at La Grande in morning.

Snow all over summit a foot to two feet deep. Was 30 inches last week but the road has been scraped and is clear and dry.

Drove fog up to edge of snow and timber, clear above, or partly cloudy and began snowing as we reached La Grande. Snowed an inch but warm and mostly melted. The valley was all bare ground before it began.

Went to Cocapewa Hotel one of the best in Oregon and of very moderate rates.

Dec. 2

Coyotes – a few tracks
Badgers – a few tracks and burrows
Weasel. – fresh tracks seen
Mink. – one seen on river.
Snowshoe rabbit: a few tracks in open
Snowshoe rabbits – a few tracks seen
Red squirrels
Porcupines – Many tracks in aspens and hundreds of trees peeled by them. dozens killed.
Throughout hills, fresh on snow.

Dec. 2 La Grande to Baker

Went with trappers Robbs and Kimsey over a poison line Southwest of La Grande in the upper Valley of Grand Ronde River, but got no coyotes. Five had been picked up there before the snow but a few were still there. Up in timbered country above the fog and over 4 inches of solid snow. Clear and sunny and warm up there. Chilly and dull in the fog and below. A little new snow in Grand Ronde Valley.

After 4 PM drove to Baker and got hold of trappers Shoemaker and planned trip with him in morning.

Baker Oregon, Dec. 3.

Lynx rufus – 1 big male, 27 lbs., in trap
Caught with scent, fish and other smells.
Coyote – A few fresh tracks
Badger – a few holes
Lepus californicus – Abundant
Sylvilagus nuttallii – Tracks common.
Brachylagus, abundant. tracks, runways
burrows.
Weasel – fresh tracks abundant

Roughleg hawk, 1 seen.
Sage grouse – 50 or more.
Cooper's one with lung grease in yard
Ravens, heard
Crows, 3 seen
Magpies – A few seen.
Pheasant – 1 seen. Many at Hereford
Shrike 1 northern

Dec. 3 – Baker to John Day
Went out with Happy Shacwater and got a big bobcat in trap, Weighed 27 lbs and had been in trap 2 days and nights.
Found a few fresh coyote traps but did not get any coyotes. Did not have time to visit all the traps.
Talked with Charles Colton, sheepman.
Snow 3 inches in town, 4 inches outside and a foot on high ridges. Foggy but warm.
Left Baker at 3:30 PM. reached John Day at 5:30, over Dalley Mountain and up Burnt River valley over Tipton over summit to Prairie & John Day. Snow over ridges but all bare ground in John Day Valley. Warm, foggy at Baker and over ranges.
Met John Lawrence, trapper at John Day. Saw one dead and lots of tracks.

Dec. 4 – John Day & Baker to Burns

John Lawrence, coyote hunter at John Day came with us to Bear Valley on head of Silvies River and went over his poison line. Got one coyote and 3 others had come to a dead horse where the ravens had eaten up all his baits. Six ravens were still at the horse and many others over the valley. Saw a rough leg and red tail and one eagle but no other birds except magpies.

Lots of deer tracks in hubbs and some snowshoe rabbits, both jack rabbits, cottontails and pygmy rabbits abundant in Bear Valley. Saw one pygmy and lots of dens + tracks, eating sage leaves entirely.

Many old badger holes, some weasel tracks.

Had lunch at Burnea and reached Burns at 5 PM. Found a good hotel at Burns, The Welcome.

Snow a foot deep in Bear Valley but clear and sunny part of day. Very little snow at Burns.

Saw Dr. Hebbard and went to office of R M Duncan to see 3 buffalo skulls from Malheur Lake bed. He gave me one and has promised the others to Ray Conway, manager of Oregon Motors Association at Portland who wants to place them in the state museum at Salem.

Met several stock men but could not find our hoppers.

Kaus – Piute name for a root, probably same as eppo – Carum gairdneri –
Honovers – Piute name for Caves

Mr. Brown says Capt. Louis at Burns is still living. He was captured when a boy at a battle with the Piutes at Card on Duck Creek

He also tells me that the Piute vocabulary by Dr. Morris has been recently published by Bu. Ethnology.

Dec. 5, Burns to Mathews Caves

Drove to Crane and then south and east to Mr. A.E. Brown's ranch a couple of miles beyond Mathews Caves. Our trapper, Walter Sutherland, was off on a trip and did not return so we missed him but had a good visit with Mr. Brown, a sheep and stock rancher who has been here since 1884. He knows Capt. Louis and many other of the Piute Indians and much of the early history of the country. Gave me many good records

Went through Mathews Cave with flash light but could not find a bat. The cave was damp but warm, about 55° I should guess. There is a boat on the water but we did not go in it.

Saw many ravens, about 17
Magpies — a few
Eagle — 1 dead by telegraph pole
Lazzuqueous roughly — 2
Red tail hawk — 2
Horned larks — 2

Grizzly bear — Skull found in Mathews Lake near mouth of Silvies River on dry bed of lake given me for B.S by P. N. Jameson, Mayor of Burns.

Dec. 16 Burns to Bend.
Took all of forenoon to get buffalo skulls from dry bed of Mathews Lake, got 10 and other bones and put in big box. Saw many more bones and skeletons, and a big perfect skull of old bull in possession of J. O. Ausmus at Lawn. He wants to keep it but may give it to us some time. He gave me one good cow skull all base of horns of elk and went and showed us where to find the buffalo skulls.
The lake is almost dry and thousands of acres are hard and cracked where the water has gone down. Some of the buffalo bones were out near the water, 2 miles from shore, many others near shore and some are found out in the tules on the edges of the lake

Oct. 4, Malheur Lake.

Snow Geese, 20000 seen in great flocks like snowfields on dry lake bed.

Canada geese - 2000 or more seen in flocks on dry lake bed.

Mostly Mallards, 2000 seen near water

Golden eagle, one or two seen near Burns and near lake below west of Burns

Bald eagle, one ad. & one yg. near Lawen, the adult on fence.

Roughleg Hawk, 3 or 4 seen

Red tail, 3 or 4 seen.

Ravens, numerous, 40 or more seen

Magpies, " 20 or more seen.

Snowy west of way to Bend but no snow there and clear at Bend. Cloudy all day at Burns and lake.

No antelope seen but said to be common along road. Country very dry and feed scarce.

Reached Bend at 5:30 P.M.

Made 140 miles in 3½ hours. 40 to 50 miles an hour on good roads. Road mostly straight, one stretch of 30 miles as straight as an arrow.

The Sisters and Jefferson show big and white in evening.

Spent evening with Tapper E. T.

Halbrook, between Bend and Redmond.

Redmond –

Eagles 2 seen
Roughlegs, 3 "
Magpies – numerous

Mr & Mrs. Wilson are unequaled proprietors of the Redmond Hotel the second best of eastern Oregon and almost as satisfactory as the Seccojawean at La Grande.

Dec. 7, Bend to Klamath

Went out with Halbrook to four of his poison stations but got only one coyote and one Pocomyscus, both dead on the snow near the sheep corrals used as a station. The coyote had gone 50 yards and the mouse lay close to a ball of lead and strychnine on which it had been nibbling.

A cold morning, 21° at Redmond but soon thawing in the sunshine.

Wonderful views of the Three Sisters, Jefferson and other peaks along the Cascades.

Left Redmond at 2 PM and reached Klamath Falls at 4 PM. Good road all the way, well scraped.

No snow at Redwood or Bend but it soon appeared and from a few inches grew deeper to a foot in the lodge pole pines and two feet on the summit at 5404 feet. Then shallow in the Klamath valley and mostly bare ground at Klamath Falls. Klamath Lake about half frozen over, too dazzle to see birds. Stopped at Hotel Hall. Mr. Hall is a genial proprietor.

Dec. 8 Tule Lake
Hutchins geese, 100 000 on Tule Lake
Cackling geese 200,000 " "
Snow geese 200 000 " "
Canada geese, 2000 on Clear Lake
Ducks 100000 on Tule Lake
Coots - a dozen in river last Bird
Dabchick, 1 " " " "
Bittern, 1 shot, Mitchell in stomach
Redtail 4 seen
Roughleg 4 "
Swainson, 2 "
Marsh hawk 3 "
Prairie Falcon 2
Duck Hawk 1
Long eared Owl 1
Sparrow hawk 1
Shrike 2
Robins 200
Solitaire 3
Bluebirds 7
Horned larks 50
Magpies 20

Dec. 8, Klamath Falls,

Drove over to Bonanza to see trapper Chas Glasgow but found he was out on his trap line. Then drove to Merrill to see trapper Clint Conklin but he was out on his line. Arranged to see Conklin this evening and to join Glasgow at 9 in the morning.

Went down to Tule Lake below Merrill to see the geese and ducks and found both in large numbers. Got a cackling goose, a snow goose and great blue heron for stomachs. The heron had eaten 1 Microtus montanus, the cackling goose pigweed seeds and green stuff. The snow goose

Klamath to Bonanza Dec 9.

Magpies - 5 or 6
Canada geese 14 flying over
Other geese - big flocks
Coots 7
Robins 200 or more in a flock and many others among juniper.
Said to stay all winter & live on berries of Juniperus occidentalis -
Waxwings - Many seen in junipers and heard singing in a soft twitter.
Stay all winter -
Mountain Bluebirds, 4 seen.

Swans - said to be dying in Warner Lake, 4 found dead. Others can not fly. Probably starving.

Dec. 9 - Klamath Falls.

Drove to Bonanza to see trapper Charles Glasgow and found him in the shed stretching 4 coyote skins he got yesterday. Went with him to east end of Valley to several poison stations but found only one dead Kangaroo Rat. Got his record for 3 years back and many good notes.
He is a very intelligent young man, just married last June to a very pleasant wife and an excellent cook. We stayed to dinner.

In afternoon saw Capt. Olivers Applegate and wrote up all the notes I could besides packing to start for home in morning.

Vs. H. & Barnes. Dec 0.

Dec. 12 Left Klamath 10:30 AM
S P for Reno and Hazen via Alturas
Ry. Through Merrill and across
dry bed of Tule Lake, Then over
lava beds to Pit River Valley
and up it to Alturas, then south
over Devils + Madeline Plains.
Much warmer in Pit River Valley
than at Klamath, no snow or ice
and cattle all out in pasture, a million
of them - Big flock of blackbirds
and lot of meadowlarks.
Saw 30 antelope close to train
half way between Horselake and
Wendel, Calif.

Dec. 10. Klamath & Altaras & Rivers.
Blue herons - a dozen in ditches in Tule Lake
Coots, a few near Altaras
Eagles - 1 at Tule Lake, 1 at Altaras.
Magpies - A few
Blackbirds flock of 5000 at Altaras
Meadowlarks, 20 at Altaras

Fallon, Nev. Dec. 11.
Mule deer head from Kingston near Austin, Nevada, 8 point buck head mounted by Anna Bailey Mills,
Very light gray, with black forehead and nose band and side spots on lower lip. No median line of black on lower lip, no black on ears, black eyering very narrow. White extension and very pure, whole face and wide circle around eyes almost pure white, throat, most of lower lip, and stripes on upper lips pure white; ears with white edges at base and tip and white stripes inside.
General color light gray, darkest along mane.
See photo -
Killed Oct. 3, 1930. Forest Ranger A.R. Jorgenson. Head mounted by Anna A. Mills.
Very pale and with clear black and white markings like <u>eremicus</u> -

Fallon, Nevada, Dec. 11, 1930.

Mule deer buck killed in Hunter Creek Canyon 12 miles west or SW. of Reno, killed about Nov. 15, 1913, by Vernon Mills. a 4 point buck weighing 140 lbs dressed.

General color of head and neck buffy brown gray, darker brown is black along mane and two patches in front of eyes, forehead, heavy eye ring, nose band and 3 chin stripes black; face, narrow eye rings, throat, most of lower lip and narrow stripes on upper lips white or whitish, inside of ears mainly white.

Top of tail yellowish but tip.

Not californianus but nearer to maverotis in color than to crooki

Actual Rise in Soda Lake Shown by Record

That the rise in Soda Lake during the last six years has been only seven and a half feet, instead of sixty, as indicated in an interview published in The Standard last week, is the fact learned from inspection of records at the reclamation office here which has been keeping data on the level of this lake for nearly 23 years.

In all that period, the figures show, the lake has risen 52.2 feet instead of ninety as previously indicated.

The period of most rapid rise of the lake level was between 1920 and 1926 when the gain was 23.2 feet.

During the last five years, the period of least gain, the lake has gained elevation at the rate of about a foot a year. The elevation of the large lake on November, this year, was 3990.3 feet above sea level.

Elevation of the little lake has been about three feet higher for several years. In 1912 the difference in the elevations of the two lakes was eight feet.

Dec 3, 1930

Board Okays

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Carson Link is Ignored

The start being made this year toward building the Carson City-Leeteville highway, pioneer stretch of the Lincoln route, is not being continued by the highway department.

Federal aid mileage between Mound House and Leeteville was "borrowed" to complete a job in the eastern part of the state with the understanding that it would be restored as soon as the next allotment of federal aid mileage were made available.

The Carson City-Mound House link of the pioneer trail of the Lincoln highway, which had been retained, had been overlooked by the present state highway department until attention was called thereto by H. R. Mighels of the Carson City Appeal.

The department responded with action in terms of actual construction when its members' attention was called to the oversight.

But the department admits nothing of the "borrowed" mileage from Mound House to Leeteville.

The tentative program for 1931 is making use of an available ten miles of federal aid for use between the city limits of Las Vegas and the Boulder dam site.

Durkee Makes Explanation

His department has been overruled, insofar as mere promises are concerned, by the federal bureau of public roads, says S. C. Durkee, state

Fallon, Nevada,

Soda Lake near Fallon has risen about 60 feet in the past 20 years and is now almost full to the lowest edge of the rim. The water in it is probably 250 feet deep and fairly pure since it was filled up with the rising water table from irrigation.

It fills an old crater or cinder cone of volcanic origin and the cone rises 100 feet above the water nearly around the lake. The lake is about a mile wide and a little longer, never freezes, clear and still and beautiful. Thousands of ducks on it now and in winter when the shallow lakes freeze over it is the resting place of innumerable ducks, geese, swans and other water birds. It has ships shores and little food for birds but is important for a refuge.

just west and south of it are dozens of swallow lakes and sloughs of recent origin, mostly not very deep and with sedgy borders where water birds feed and rest when not riveshot at.
Some of these might well be also included in a refuge as the land around them is rough sand dunes and ridges entirely worthless for any farm purposes. Part of it is Govt. land and although sections of railroad land is of little value. Some has sold for 2 dollars an acre.

A considerable refuge is being planned in the Carson Sink or Stillwater Sink country west Fallon and Soda Lake and perhaps some of these other ponds should be included.

Coyotes about Fallon are rather numerous and kill many sheep and turkeys, often coming into small pastures close to ranch buildings to catch them. One man has been obliged to corral his sheep at night to protect them and thus the coyotes come in and kill them in the pastures during the daytime.

There are so many dogs around that no trapping or poisoning is allowed and only an occasional coyote is shot. The sheep on small farms would add much to the prosperity of the region.

A badger killed a lot of chickens for a neighbor of my sister at Fallon, Nev. and carried into the burrow. When dug out the burrow yielded 27 full grown hens and one badger.

Fallon, Nevada

Jack rabbits are scarce and have been decreasing for over a year. Are much less numerous than last spring but were most numerous a year ago last spring.
Some dead rabbits have been seen this last summer.

Coyotes are common and kill sheep and turkeys –

Dec. 12, Fallon, Nevada.

Drove down to the Carson River Sink, away east of Stillwater to see what birds were still there.
The water was mostly frozen over but we could see about 150 swans on the inlets in small open spaces and hear a lot more over in the tules where they could not be seen. A few ducks and geese could be seen but heard at a distance but we could not get near them.

The area proposed for a refuge is good waterfowl land and water with extensive breeding grounds for ducks, geese and waders. Cattle must be kept off in the breeding season and probably at all times, so the tules, grass and weeds will remain as food and cover.

Dec. 13 On Cars

Daylight came about Hallock Nevada and from there to east of Wells the Jack rabbit tracks were exceedingly numerous, tramping the snow down like a barnyard along the sides of the track.

After entering Utah I saw no more rabbit tracks or very few for about an hour or until near Montello, Utah, where again numerous.

The tracks were not seen far east of Montello and it seems they are mostly in ranch valleys, where there is grass and sagebush and Bigelovia, not in barren unoccupied stretches of country. They evidently gather where the best food is.

Salt Lake is all open except a little ice along shores.

A few gulls and ravens seen.

Freezing at Ogden but not much snow on ground. Frozen all the way to Evanston but no snow at Green River at dark. A little snow at Rock Springs at 9 P.M.

A warm day and very comfortable in car. Read and reports all day.

Dec. 14, On U.P. train

Daylight somewhere near Cheyenne but out in Nebraska when I got up. All day across Nebraska and entered Omaha at dark.

A little snow on ground in morning but it grew warmer as we progressed and soon the ground was bare and cattle grazing out in pastures, grass and lucerne show a touch of green and winter wheat is green over large fields. Lots of corn in ricks and piles on the ground, but now in great circular woven wire cribs that must hold 1000 bushels or more. Some open at the top and some covered with hay. Much stock being fed. Good crops and a rich farm country.

Thermometer below zero and I worked all day.

Omaha at dark.

Dec. 15 To Chicago & east
Arrived at Chicago on
C. M & St P. at 7:30 AM,
Left on B & O at 10 AM,
No snow last night at Omaha
or the eastern bnd of Nebraska
but in middle of night there
was snow in Iowa and at
daylight at Elgin 5 & 6 inches
of snow. At Chicago 2 & 3
inches of snow and snowing
fast. Snow tapered off in
southern Indiana and none in
Ohio but ice on ponds.
A little snow met in eastern Ohio
and increasing till after dark
western Pennsylvania.

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BUREAU OF BIOLOGICAL SURVEY.
WASHINGTON.

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U. S. Department of Agriculture,

Washington, D. C.

Bureau of Biological Survey.

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